Department of Mathematics and Computer Science

Department-Specific Requirements, Guidelines and Clarifications to the College of Engineering and Science Tenure and Promotion Guidelines

March 31, 2018

Departmental Promotion and Tenure Committee

At the last faculty meeting of the Winter term, the members of the departmental P&T committee for the next academic year shall be named. The departmental P&T committee consists of all tenured members of the department not serving as department chair or as a member of a subsequent P & T committee (e.g. college or university level).   Before the end of the term, the committee shall meet and elect a chair. The chair is responsible for calling meetings, organizing the committee for the submissions of letters of evaluation, and signing the dossier on behalf of the committee. The name of the chair shall be made available to the entire faculty.   If there are changes to the committee (e.g., after the election of faculty to the college or university committees at the E&S convocation), these changes shall be noted at the first faculty meeting of the academic year.

In addition:

- The person seeking tenure and or promotion shall not be part of the discussion, review, or evaluation of their own dossier;
- All members of the committee are part of the review, discussion, and evaluation of the dossiers for lecturers and those seeking tenure and promotion to Associate Professor; and
- Members of the committee who hold the rank of Professor are part of the review, discussion, and evaluation of the dossiers of those seeking promotion from Associate Professor to Professor.

Submitted dossiers go through several layers of review. The departmental P&T committee is the first to review a dossier and has two weeks from the due date of the dossier to complete their evaluation. Given the need to schedule meetings in a timely manner, the candidate should inform the chair of the department and chair of the departmental P&T committee of their intent to submit a dossier as early as possible.

REQUIREMENTS FOR THE ENTIRE DEPARTMENT

1. General remarks applicable to all levels of tenure and promotion

The department welcomes collaborative research with other disciplines, and high quality pedagogical research can be very valuable as well. However, the amount of research done within the applicant's main discipline must be substantially greater than the amount of research done outside of it. For example, for a Mathematics faculty, the number of collaborative papers outside of Mathematics or pedagogical papers must be less than the number of papers in Mathematics proper. Similarly for the other disciplines. Funded grants will be regarded as HIGH, MEDIUM, or LOW levels of research, according to the monetary amount associated with the grant and the level of involvement and contribution of the PI/co-PI. As a rough example, in 2018 dollar values, a grant of $20,000 or more would typically be regarded as HIGH, while any grant amount of $2,000 or less will generally be regarded as LOW.

2. Tenure / Promotion to Associate Professor

The department strongly urges all new tenure-track faculty to focus there research efforts toward the goal of publications and/or presentations at the HIGH level as required by the college and specified in the table below; this means *peer-reviewed publications*, or presentations in *conferences which enforce a rigorous screening procedure*. Junior faculty need to be aware of the possible distraction of publishing too many non-peer reviewed articles or participating in conferences which do not require anything other than an abstract and the registration fee. The department strongly recommends publishing at least two peer-reviewed papers. If only one peer-review paper, but of exceptional quality, has been published, the applicant should explain this in his/her application, and provide a letter of support from a faculty member of a research institution explaining the significance of the applicant's paper. New faculty is also urged to extend their research beyond their Ph.D. dissertation and engage in new research; papers published directly out of dissertation may not counted.

3. Promotion to Full Professor

The department will adhere to the college wide minimum requirement of at least four HIGH level publications, with at least three of them initiated after promotion to Associate Professorship; however, the department strongly encourages applicants to go beyond the required minimum. See below for more details.

DISCIPLINE SPECIFIC REQUIREMENTS

MATHEMATICS

Tenure/Assistant to Associate Professor: Minimum three published papers in mathematics after joining the program, at least one of which should be in a peer-reviewed mathematics journal as specified in the table. Two peer-reviewed papers are strongly recommended. A peer-reviewed book chapter published by a well-known publisher in the field counts as a paper; a full peer-reviewed book counts as two papers. Collaborative papers in areas outside of (but relevant to) mathematics may also count; however, the number of such papers must be less than the number of papers in mathematics proper.

Associate Professor to Professor: Minimum five published papers in mathematics, with at least four of them at HIGH level; papers previously submitted for promotion to Associate Professor will not be re-counted for promotion to Professor. A peer-reviewed book chapter published by a well-known publisher in the field counts as a paper; a peer-reviewed full book counts as two papers. Collaborative papers in areas outside of (but relevant to) mathematics may also count; however, the number of such papers must be less than the number of papers in mathematics proper. Attempts to secure research funding from external sources are expected, and the attainment of funding will be viewed very favorably. The department will also recognize significant post-funding work on proper execution and completion of major funded research.

MATHEMATICS EDUCATION

Tenure/Assistant to Associate Professor: Minimum three published papers in mathematics education in conferences/journals after joining the program, at least one of which should be in standard peer-reviewed journal. A

book chapter published by well-known publishers in the field counts as a paper; a full book counts as two papers. Collaborative papers in related areas may also count.

Associate Professor to Professor: Minimum five published papers in mathematics education conferences/journals; papers previously submitted for promotion to Associate Professor will not be re-counted for promotion to Professor. A book chapter published by well-known publishers in the field counts as a paper; a full book counts as two papers. Collaborative papers in related areas may also count. Attempts to secure research funding from external sources are expected, and the attainment of funding will be viewed very favorably.

COMPUTER SCIENCE AND SOFTWARE ENGINEERING

Tenure/Assistant to Associate Professor: Minimum three published papers in computer science/software engineering in conferences/journals after joining the program, one of which should be a paper in a journal approved by the program. A book on an area of Computer Science/Software Engineering published by well-known publishers in the field counts as a paper. If a book is submitted, then a minimum of two published papers are required.

Associate Professor to Professor: Minimum five published papers in computer science/software engineering conferences/journals. At least one paper should be published in a Journal approved by the program. Papers submitted to promotion to Associate Professor will not be re-counted for promotion to Professor. A book on an area of Computer Science/Software Engineering published by well-known publishers counts as a conference paper. If a book is submitted, then a minimum of four published papers including the journal paper are required.

Scholarship Examples: Department of Mathematics and Computer Science, College of Engineering & Science

The preponderance of the evidence of scholarship should be peer-reviewed and research-based in the area of the faculty's expertise, teaching pedagogy, or integration and application. The CES P&T criteria state that promotion to Associate Professor requires at least 1 HIGH and at least 1 MEDIUM publication and promotion to Professor requires at least 4 HIGH publications with 3 of these since promotion to Associate Professor.

Level	Types (from CES Tenure and Promotion Guidelines 4/2016)	Examples:
High	- Peer-reviewed publications in national or international journals in the profession - Peer-reviewed publications in national or international conferences in the profession - Patents granted - Books and book chapters adopted outside of UDM*	Mathematics: - Articles in journals consistently having an MR/AMS Mathematical Citation Quotient (MCQ) score higher than 0.15. Examples: American Mathematical Society journals, such as the *Proceedings of the AMS*, *Transaction of the AMS*, other standard journals such as *Math. Zeitschrift*, standard publications of major organizations (e.g.,the SIAM) - Books published by research level mathematics publishers enforcing a rigorous anonymous review process, such as Cambridge University Press, Springer, AMS, MAA, SIAM, and the big commercial publishers such as Wiley, McGraw-Hill, etc - Flagship college level journals published by the MAA with rigorous peer-review, such as the *American Mathematical Monthly* - Invited talk at a national or international conference that is associated with an honorarium or paid expenses such as airfare, hotel, sustinence - Funded proposals (as a Principal Investigator) to national or international organizations such as National Science Foundation** Mathematics Education: - Association of Mathematics Teacher Educators (AMTE) journals (e.g., Contemporary Issues in Technology and Teacher Education, Mathematics Teacher Educator) - Association for the Advancement of Computing in Education (AACE) journals (e.g., Journal of Computers in Science and Mathematics Teaching), and the proceedings of AACE conferences. - North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) proceedings. - Other standard publications of major organizations (e.g., NCTM journals) - Books published by the companies enforcing a rigorous anonymous review process, such as

| | | Routledge Taylor & Francis Group, Springer, and well-known commercial publishers such as Wiley, McGraw-Hill, etc.
• Funded proposals (as a Principal Investigator) to national or international organizations such as Institute of Education Sciences, National Science Foundation**

Computer Science and Software Engineering:
• ISI indexed Journals (e.g., Applied Soft Computing)
• Scopus indexed Journals (e.g., Journal of Computer Science and Technology)
• World Scientific Journals (e.g., IJPRAI, IJSEKE)
• IET journals (e.g., IET Computers & Digital Techniques, IET Software)
• Other standard publications of major organizations (e.g., the SIAM journals)
• Funded proposals (as a Principal Investigator) to national or international organizations such as National Science Foundation** |
| Medium | • Non peer-reviewed publications in national or international journals in the profession
• Non peer-reviewed publications in national or international conferences in the profession
• Peer-reviewed publications in local or regional journals in the profession
• Peer-reviewed publications in regional conferences in the profession
• Books and book chapters adopted internally to UDM* | Mathematics:

• Peer-reviewed publications at national conferences, or presentations at national or international conferences which implement a rigorous screening procedure (such as requiring the presenter a copy of their talk, or a 5-page summary of their work; supplying an abstract is not enough)
• Publications in journals consistently having an MR/AMS Mathematical Citation Quotient (MCQ) score of 0.15 or below
• Invited talk at a regional or local conference that is associated with an honorarium
• Funded proposals (as a Principal Investigator) supported by UDM funds or local or regional organizations
• Journals for undergraduate research (e.g., as mentor author in *American Journal of Undergraduate Research)*

Mathematics Education:
• Paper presentations at national conferences (e.g., AMTE, NCTM, AERA meetings)
• Funded proposals (as a Principal Investigator) supported by UDM funds or local or regional organizations
• Undergraduate research publications (e.g., Special Interest Group of the MAA on Research in |

		Undergraduate Mathematics Education proceedings) Computer Science and Software Engineering: • Paper presentations at national conferences (e.g., CIKM, ICML, ICMLA, ICSE) • Funded proposals (as a Principal Investigator) supported by UDM funds or local or regional organizations • Journals for undergraduate research (e.g., [Advanced Journal of Graduate Research](#)) For all disciplines: Significant post-funding work on execution and completion of major funded research.
Low	• Non peer-reviewed publications in local or regional journals in the profession • Non peer-reviewed publications in regional conferences in the profession • Invited talks • Articles in local media • Interviews with local media	Mathematics: • Presentations at national, local, or regional conferences • Invited talks not associated with any honorarium All disciplines: • Poster or oral presentations in the student sessions at national conferences • Poster or oral presentations at local or regional conferences

*The levels listed are for the first edition of a book or book chapter, but subsequent editions are one level lower.

**A funded proposal should not be the only HIGH submission for promotion to Associate Professor